Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently amended)   A method of making block error rate measurements in a layered protocol communications system, comprising:

opening and maintaining an information block flow by sending repeated message blocks which are defined at a selected layer in the protocol stack below the topmost layer; [[and]]

monitoring ack/nack messages sent in response to the message blocks to determine whether the message blocks have been correctly transported; and

calculating said block error rate measurements based at least in part on the monitored ack/nack messages.

2. (Original) The method of claim 1, wherein the message blocks have a predetermined characteristic which causes the message blocks to be discarded upon processing at the selected protocol layer in a communications unit receiving the message blocks.

3. (Original) The method of claim 1, wherein the communications system is a general packet radio service (GPRS) and the selected protocol layer is a GPRS mobility management layer.

4. (Original) The method of claim 3, wherein the repeated message blocks are GMM_INFORMATION message blocks.

5. (Original) The method of claim 4, wherein the predetermined characteristic comprises absence from a message block of any information elements other than a message header.

6. (Original) The method of claim 1, wherein the communications system is a general packet radio service (GPRS) and the selected protocol layer is a GPRS logical link control layer.

7. (Original) The method of claim 6, wherein the repeated message blocks are GRR_DATA_REQ message blocks.

8. (Original) The method of claim 7, wherein the predetermined characteristic comprises inclusion in a message block of an invalid frame check sequence.

9. (New)   A method of making block error rate measurements in a layered protocol communications system, comprising:

    constructing message blocks to conform to a message structure defined at a selected layer below a topmost layer in a protocol stack of the layered protocol communications system;

    opening and maintaining an information block flow by sending repeated said message blocks through the system;

    monitoring ack/nack messages sent in response to the message blocks to determine whether the message blocks have been correctly transported; and

    measuring block error rate as a predetermined function of occurrence of monitored nack messages.

10. (New)   The method of claim 9, wherein the message blocks are constructed to have a predetermined characteristic that causes the message blocks to be discarded upon processing at the selected protocol layer in a communications unit receiving the message blocks.

11. (New)   The method of claim 9, wherein the communications system is a general packet radio service (GPRS) and the selected protocol layer is a GPRS mobility management layer.

12. (New)   The method of claim 11, wherein the repeated message blocks are GMM_INFORMATION message blocks.

13. (New)   The method of claim 12, wherein the message blocks are constructed to have a predetermined characteristic that causes the message blocks to be discarded upon processing at the selected protocol layer in a communications unit receiving the message blocks, the predetermined characteristic comprising absence from a message block of any information elements other than a message header.

14. (New)   The method of claim 9, wherein the communications system is a general packet radio service (GPRS) and the selected protocol layer is a GPRS logical link control layer.

15. (New)   The method of claim 14, wherein the repeated message blocks are GRR_DATA_REQ message blocks.

16. (New)   The method of claim 13, wherein the message blocks are constructed to have a predetermined characteristic that causes the message blocks to be discarded upon processing at the selected protocol layer in a communications unit receiving the message blocks, the predetermined characteristic comprising inclusion in a message block of an invalid frame check sequence.

17. (New)   A method of making block error rate measurements in a general packet radio service (GPRS) layered protocol communications system, comprising:

    constructing message blocks to conform to a message structure defined at a selected one of

    (i)   a GPRS mobility management layer and
    (ii)   a GPRS logical link control layer

in a protocol stack of the GPRS layered protocol communications system, said message blocks being respectively one of

    (i)   GMM_INFORMATION message blocks defined in the mobility management layer and

    (ii)   GRR_DATA_REQ message blocks defined in the logical link control layer;

       opening and maintaining an information block flow by sending repeated said message blocks through the system;

       monitoring ack/nack messages sent in response to the message blocks to determine whether the message blocks have been correctly transported; and

       measuring block error rate as a predetermined function of occurrence of monitored nack messages.

18. (New)   The method of claim 17, wherein the message blocks are constructed to have a predetermined characteristic that causes the message blocks to be discarded upon processing at the selected protocol layer in a communications unit receiving the message blocks.

19. (New)   The method of claim 18, wherein the predetermined characteristic comprises:

    (i) absence from a message block of any information elements other than a message header in the case of GMM_INFORMATION message blocks, and

    (ii) inclusion in a message block of an invalid frame check sequence in the case of GRR_DATA_REQ message blocks.

20. (New)   Apparatus for making block error rate measurements in a layered protocol communications system, comprising:

       a message block transmitter for constructing message blocks to conform to a message structure defined at a selected layer below a topmost layer in a protocol stack of the layered protocol communications system, and for opening

and maintaining an information block flow by sending repeated said message blocks through the system; and

a monitor for monitoring ack/nack messages sent in response to the message blocks to determine whether the message blocks have been correctly transported, and for measuring block error rate as a predetermined function of occurrence of monitored nack messages.

21. (New)   Apparatus for making block error rate measurements in a general packet radio service (GPRS) layered protocol communications system, comprising:

a message block transmitter for constructing message blocks to conform to a message structure defined at a selected one of

(i)   a GPRS mobility management layer and

(ii)   a GPRS logical link control layer

in a protocol stack of the GPRS layered protocol communications system, said message blocks being respectively one of

(i)   GMM_INFORMATION message blocks defined in the mobility management layer and

(ii)   GRR_DATA_REQ message blocks defined in the logical link control layer,

and for opening and maintaining an information block flow by sending repeated said message blocks through the system; and

a monitor for monitoring ack/nack messages sent in response to the message blocks to determine whether the message blocks have been correctly transported, and for measuring block error rate as a predetermined function of occurrence of monitored nack messages.

22. (New)   A method of making block error rate measurements in a layered protocol communications system, comprising:

opening and maintaining an information block flow by sending message blocks which are defined at a selected layer in the protocol stack below the topmost layer, wherein at least some of the message blocks are intentionally

constructed to be discarded following receipt and processing thereof to return an ack/nack message; and

monitoring ack/nack messages sent in response to receipt of the message blocks to determine whether the message blocks have been correctly transported.